

Patent Application No. 10/616,486
Attorney Docket No. 134779.01101

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION OF)	
)	ART UNIT: 3622
JESSE T. QUATSE ET AL.)	
)	EXAMINER: DANIEL LASTRA
APPLICATION NUMBER: 10/616,486)	
)	
FILED: JULY 8, 2003)	
)	
TITLE: HIGH-PRECISION CUSTOMER-)	
BASED TARGETING BY)	
INDIVIDUAL)	
USAGE STATISTICS)	
)	

REPLY BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Reply Brief constitutes a complete reply to the Examiner's Answer (the "Answer") mailed May 6, 2010 in the above-identified application in accordance with 37 C.F.R. §41.41. This Reply Brief relates to the appeal of the final rejection of claims 7-27. The time for filing a reply brief to the Answer expires on July 6, 2010. Accordingly, this Reply Brief is being timely filed on June 17, 2010.

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III. STATEMENT OF ADDITIONAL FACTS

Appellants do not believe that any additional facts are necessary to address the points raised in the Answer.

IV. ARGUMENTS

The Arguments made in the Appeal Brief dated February 8, 2010 are hereby fully incorporated by reference.

A. CLAIMS 7-12, 18 AND 23-27 ARE NOT ANTICIPATED UNDER 35 U.S.C. §102(E) BY *SRIDHAR ET AL.*

A patent application is anticipated under 35 U.S.C. §102(e) if the invention was described in a published U.S. patent application, a PCT application designating the United States and published in English or a patent granted from a U.S. patent application that was filed by another before the invention by the applicant.¹ To anticipate a claim, a reference must disclose every element of the challenged claim and allow one skilled in the art to make the anticipating subject matter. See General Electric Co. v. Nintendo Co., Ltd., 179 F.3d 1350, 1356 (Fed. Cir. 1999); PPG Indus. v. Guardian Indus. Corp., 75 F.3d 1558, 1566 (Fed. Cir. 1996).

Independent Claim 23

Appellants dispute the appropriateness of the rejection of claim 23 under 35 U.S.C. §102(e). Specifically, the Office improperly imported limitations from the specification to form its interpretation of claim 23. In addition, independent claim 23 is not anticipated by U.S. Patent

¹ 35 U.S.C. §102(e) states, “A person shall be entitled to a patent unless - ... (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.”

Application Publication No. 2003/0208754 to *Sridhar et al.* (*Sridhar*) because *Sridhar* fails to disclose each and every limitation of claim 23.

The Office Incorrectly and Improperly Interpreted Claim 23

On page 16 of the Answer, the Examiner resorts to the specification to interpret the meaning of claim 23. Specifically, the Examiner states:

Appellant's specification discloses that Appellant's claimed invention is a "Customer-Based" targeting which is obtained by selecting from the same probability matrix of Figure 3 the two promotional offers of highest probability for each customer (see Appellant's specification page 14, lines 9-15). Therefore, using Appellant's specification, the Examiner would interpret that the Appellant's "identifying the highest score and identifying the customer substantially scoring the highest score" would be performed by each customer (i.e. by each row of Appellant's figure 3) and targeting each customer with a personalize [sic] offer list would be interpreted as selecting from the same probability matrix of Figure 3 the promotional offers of highest probability for each customer (see Appellant's specification page 9, lines 1-15; see figure 4).

However, such interpretation blatantly contradicts the limitations expressly set forth in claim 23, and impermissibly alters the scope of claim 23 to cover merely a single embodiment described in the specification. Claims are not to be confined to the embodiments found in the specification, and it is improper to import limitations from the specification into the claims. In re Trans Texas Holdings Corp., 498 F.3d 1290, 1299 (Fed. Cir. 2007).

Appellants' claim 23 requires generating a plurality of scores for a plurality of customers, and identifying the highest score in the plurality of scores. The limitation of identifying the highest score involves identifying the highest score from among all of the scores generated for all of the customers. As an example, referring to Appellants' Figure 3 (reproduced below), claim 23 requires identifying the highest score from the entire matrix.

	OFFER PROBABILITY / SCORE			
	offer-1	offer-2	offer-3	offer-4
customer-1	0.006	0.002	0.004	0.009
customer-2	0.007	0.011	0.020	0.001
customer-3	0.009	0.001	0.003	0.002
customer-4	0.004	0.003	0.002	0.005

Figure 3

In contrast, the Office incorrectly interprets the limitation of identifying the highest score in the plurality of scores in claim 23 to mean identifying the highest score associated with each customer. Referring back to Appellants' Figure 3, using the Examiner's interpretation, the limitation of identifying the highest score would be performed for each customer, and therefore for each row of the matrix rather than the entire matrix. For example, using the Examiner's interpretation, Offer 4 would be assigned to Customer 1 because Offer 4 has the highest score in the Customer 1 row of the matrix. Similarly, using the Office's interpretation, Offer 3 would be assigned to Customer 2, Offer 1 would be assigned to Customer 3 and Offer 4 would be assigned to Customer 4.

The Examiner states on page 16 of the Answer that because a portion of the specification describes Customer-Based targeting, the Office interprets the scope of claim 23 to include this embodiment. This interpretation is faulty and improper. It is important not to import a limitation into a claim when the limitation is not a part of the claim. Superguide Corp. v. DirecTV Enterprises, Inc., 358 F.3d 870, 875 (Fed. Cir. 2004). This is because claims may embrace different subject matter than is illustrated in the specific embodiments in the specification. Phillips v. AWH Corp., 415 F.3d 1303, 1316 (Fed. Cir. 2005).

The Examiner has improperly imported limitations into claim 23 which are not part of this claim. Claim 23 clearly recites identifying a highest score in the plurality of scores. The plurality of scores from which the highest score is identified is generated for a plurality of customers. As such, claim 23 requires identifying a highest score from all scores generated for all customers. The language of claim 23 in no way states or implies that identifying a highest score is performed on a customer-by-customer basis. Nonetheless, the Examiner has impermissibly imported this limitation into claim 23 from language used in the specification. Because the Examiner was unable to find prior art that anticipated or rendered obvious claim 23, the Examiner has instead imported language from the specification into the claim in an effort to change the scope of claim 23 to be consistent with *Sridhar*. The Examiner has impermissibly imported limitations into claim 23 that are not part of the claim. As such, The Examiner's interpretation of the scope of claim 23 should be rejected.

Sridhar Fails to Anticipate Claim 23

Independent claim 23 is not anticipated by *Sridhar* because *Sridhar* fails to disclose each and every limitation of claim 23. More particularly, *Sridhar* fails to disclose at least the following elements required by claim 23:

- generating a plurality of scores for said plurality of customers, each said score being associated with one said customer and with one said offer, and each score measuring a probability that the associated customer will make a purchase in accordance with the associated offer;
- identifying, by a computing device in said electronic system, a highest score in said plurality of scores;
- determining: a customer, from said plurality of customers, associated with said highest score, and a first promotional offer, from said plurality of promotional offers, associated with said highest score;
- assigning said first promotional offer to a first personalized offer list for said customer if said first promotional offer satisfies one or more

constraints on one or more of the following: a total number of first promotional offers that are distributable, and a total number of promotional offers that are distributable to said customer; and

- successively repeating said identifying, determining and assigning steps for each next highest score until all of the promotional offers in said plurality of promotional offers have been assigned to personalized offer lists.

Sridhar discloses a system and method for providing a subscriber with relevant advertisements based on the subscriber's purchase prediction for various products and information such as location, ongoing events and personal events (*See Sridhar* ¶0024). The purchase prediction is determined for individual subscribers as illustrated by the specification language from *Sridhar* which provides "[t]he objective for the advertisement system is two folds [sic] one to attract the subscriber to a relevant event, which is close to him, and second to draw his attention to a product which has [sic] largest purchase prediction **for him**" (*Sridhar* ¶0156, emphasis added).

As discussed above, claim 23 is directed to generating a plurality of scores for a plurality of customers, and then identifying the highest score from the plurality of scores. For example, referring to Appellants' Figure 3, according to the limitations of claim 23, the score having a value of 0.020 would be identified as the highest score because it is the highest score from the plurality of scores generated for the plurality of customers (i.e., Customer 1, Customer 2, Customer 3 and Customer 4).

In contrast, the *Sridhar* system analyzes advertisements for a single customer in isolation from those which may be offered to other customers. The *Sridhar* system distributes what it determines to be the best advertisement based on analyzing information only for a single customer. As such, the *Sridhar* system distributes what it determines to be the best advertisement

to a customer regardless of whether that advertisement would have a higher likelihood of being accepted by another customer.

To further highlight this distinction, a comparison of how an offer list is created pursuant to claim 23 and the *Sridhar* system is included below. Table 1 illustrates exemplary scores associated with an offer and a customer. For purposes of this example, we assume the following constraints: (1) each offer can only be distributed twice; and (2) each customer can only receive two offers.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Table 1

Offer List Creation Pursuant to Claim 23

Under claim 23, the highest score is identified from the plurality of scores generated for the plurality of customers (i.e., the entire matrix). Referring to Table 1, the highest score has a value of 0.17 and is associated with Customer 3 and Offer 1. Offer 1 has not been distributed twice and Customer 3 has not received two offers. As such, Offer 1 is assigned to Customer 3.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Customer 1	Customer 2	Customer 3	Customer 4
		Offer 1	

Claim 23 requires that this process be repeated for each next highest score. Referring to Table 1, the next highest score has a value of 0.11, and is associated with Customer 1 and Offer 2. Offer 2 has not been distributed twice and Customer 1 has not received two offers. As such, Offer 2 is assigned to Customer 1.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Customer 1	Customer 2	Customer 3	Customer 4
Offer 2		Offer 1	

The next highest score has a value of 0.09 and is associated with Customer 2 and Offer 1. Offer 1 has only been distributed once, and Customer 2 has not yet received two offers. As such, Offer 1 is assigned to Customer 2.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Customer 1	Customer 2	Customer 3	Customer 4
Offer 2	Offer 1	Offer 1	

The next highest score has a value of 0.08 and is associated with Customer 1 and Offer 1 as well as with Customer 3 and Offer 4. Customer 1 has only received one offer; however, Offer 1 has already been distributed twice. As such, Offer 1 is not assigned to Customer 1. Customer 3 has only received one offer, and Offer 4 has not been distributed twice. As such, Offer 4 is assigned to Customer 3.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Customer 1	Customer 2	Customer 3	Customer 4
Offer 2	Offer 1	Offer 1	
		Offer 4	

The next highest score has a value of 0.07 and is associated with Customer 1 and Offer 4 as well as with Customer 3 and Offer 3. Customer 1 has only received one offer, and Offer 4 has only been distributed once. As such, Offer 4 is assigned to Customer 1. Customer 3 has already received two offers, so Offer 3 is not assigned to Customer 3.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Customer 1	Customer 2	Customer 3	Customer 4
Offer 2	Offer 1	Offer 1	
Offer 4		Offer 4	

The next highest score has a value of 0.06 and is associated with Customer 4 and Offer 4. Customer 4 has not yet received an offer, but Offer 4 has been distributed twice. As such, Offer 4 is not assigned to Customer 4.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Customer 1	Customer 2	Customer 3	Customer 4
Offer 2	Offer 1	Offer 1	
Offer 4		Offer 4	

The next highest score has a value of 0.05 and is associated with Customer 3 and Offer 2 as well as with Customer 4 and Offer 3. Customer 3 has already received two offers, so Offer 2 is not assigned to Customer 3. Customer 4 has not been assigned any offers, and Offer 3 has not yet been distributed, so Offer 3 is assigned to Customer 4.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Customer 1	Customer 2	Customer 3	Customer 4
Offer 2	Offer 1	Offer 1	Offer 3
Offer 4		Offer 4	

The next highest score has a value of 0.04 and is associated with Customer 2 and Offer 2 as well as with Customer 4 and Offer 2. Customer 2 has received one offer, and Offer 2 has been distributed once, so Offer 2 is assigned to Customer 2. Offer 2 has been distributed twice, so Offer 2 is not assigned to Customer 4.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Customer 1	Customer 2	Customer 3	Customer 4
Offer 2	Offer 1	Offer 1	Offer 3
Offer 4	Offer 2	Offer 4	

The next highest score has a value of 0.03 and is associated with Customer 1 and Offer 3 as well as with Customer 4 and Offer 1. Customer 1 has already received two offers, so Offer 3 is not assigned to Customer 1. Offer 1 has been distributed twice, so Offer 1 is not assigned to Customer 4.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Customer 1	Customer 2	Customer 3	Customer 4
Offer 2	Offer 1	Offer 1	Offer 3
Offer 4	Offer 2	Offer 4	

The next highest score has a value of 0.02 and is associated with Customer 2 and Offer 4. Customer 2 has received two offers, and Offer 4 has been distributed twice, so Offer 4 is not assigned to Customer 2.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Customer 1	Customer 2	Customer 3	Customer 4
Offer 2	Offer 1	Offer 1	Offer 3
Offer 4	Offer 2	Offer 4	

The next highest score has a value of 0.01 and is associated with Customer 2 and Offer 3.

Customer 2 has already received two offers, so Offer 3 is not assigned to Customer 2.

	Offer 1	Offer 2	Offer 3	Offer 4
Customer 1	0.08	0.11	0.03	0.07
Customer 2	0.09	0.04	0.01	0.02
Customer 3	0.17	0.05	0.07	0.08
Customer 4	0.03	0.04	0.05	0.06

Customer 1	Customer 2	Customer 3	Customer 4
Offer 2	Offer 1	Offer 1	Offer 3
Offer 4	Offer 2	Offer 4	

Table 2 below illustrates the resulting offer list associated with this analysis.

Customer 1	Customer 2	Customer 3	Customer 4
Offer 2	Offer 1	Offer 1	Offer 3
Offer 4	Offer 2	Offer 4	

Table 2

Offer List Creation Pursuant to *Sridhar*

In contrast, *Sridhar* assigns offers to customers based on the highest scoring offers for that customer. For example, referring to Table 1, *Sridhar* would assign offers to Customer 1, followed by Customer 2, Customer 3 and Customer 4. Since each customer can receive only two offers, the *Sridhar* system would assign to Customer 1 the two offers having the highest scores

(i.e., Offer 1 and Offer 2). Likewise, the *Sridhar* system would assign Offer 1 and Offer 2 to Customer 2.

The offers having the highest scores associated with Customer 3 are Offer 1 (0.17) and Offer 4 (0.08). However, Offer 1 has already been distributed to two customers. As such, Offer 1 is not assigned to Customer 3 even though Offer 1 has the highest probability of being accepted by Customer 3. Instead, Customer 3 is assigned Offer 3 and Offer 4. Customer 4 is likewise assigned Offer 3 and Offer 4. Table 3 below illustrates the resulting offer list associated with analysis under the *Sridhar* system.

Customer 1	Customer 2	Customer 3	Customer 4
Offer 1	Offer 1	Offer 3	Offer 3
Offer 2	Offer 2	Offer 4	Offer 4

Table 3

As evident from this analysis and a comparison of Table 2 and Table 3, claim 23 operates completely differently from the *Sridhar* system. Unlike *Sridhar*, using the method of claim 23 makes it more likely that customers receive offers that they are most likely to accept. This is accomplished by analyzing scores associated with a customer and an offer in light of scores assigned to other customers and offers. In contrast, *Sridhar* merely analyzes scores for a single customer in isolation of the scores associated with other customers. By doing so, however, *Sridhar* fails to ensure that a customer receives the offer that customer is most likely to accept.

In light of the foregoing, *Sridhar* fails to disclose every element of claim 23, and, as such, does not render the present invention unpatentable under 35 U.S.C. §102(e). Claims 7-12 and 24-27 depend from claim 23 and thus contain all of the limitations of claim 23. Accordingly,

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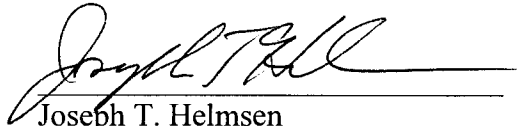
Appellants request that the §102(e) rejections associated with claims 7-12 and 23-27 be withdrawn.

V. CONCLUSION

For the reasons set forth in the Appeal Brief and in this Reply Brief, Appellants requests reversal of the Examiner's rejections.

Appellants do not believe that an additional fee is required. In the event that an additional fee is required for this Reply Brief, the Commissioner is hereby authorized to charge such fees to Deposit Account No. 50-0436. Please refund any overpayment to Deposit Account No. 50-0436.

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